

**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A single channel method for estimating a halftone screen frequency from image data, comprising:
  1. multiplying a frequency measurement signal by a factor;
  2. adding the multiplied frequency measurement signal to an image data signal to produce an output signal;
  3. adjusting the factor multiplied to the frequency measurement signal based on a control signal, wherein the control signal is based on a characteristic of the image data; **and**
  4. interpolating the output signal to produce the halftone screen frequency **estimate; estimate; and**
  5. **subtracting a frequency signal from the image data signal, to produce the frequency measurement signal.**
2. (Original) The method of claim 1, further comprising:
  1. measuring a contrast within a window of the image data to produce the control signal.
3. (Original) The method of claim 1, further comprising:
  1. filtering the image data using a low-pass filter to produce the image data signal.
4. (Original) The method of claim 1, further comprising:
  1. sub-sampling the image data to produce the image data signal.
- 5-6. (Canceled)
7. (Previously Presented) The method of claim 1, further comprising:

outputting the output signal which is an estimate of the halftone screen frequency, to a de-screening device.

8. (Currently Amended) An apparatus for estimating a halftone screen frequency, comprising:

- a multiplier which multiplies a frequency measurement signal by a factor;
- a combiner which combines the multiplied frequency measurement signal with an image data signal to produce an output signal;
- an adjuster which adjusts the factor multiplied to the frequency measurement signal based on a control signal, wherein the control signal is based on a characteristic of the image data; and
- an interpolator for interpolating the output signal to produce the halftone screen frequency ~~estimate~~estimate; and

a subtracting module for subtracting a frequency measurement from the image data signal, to produce the frequency measurement signal.

9. (Original) The apparatus of claim 8, further comprising:

- a contrast measuring device which measures contrast within a window of the image data to produce the control signal.

10. (Original) The apparatus of claim 8, further comprising:

- a low-pass filter for filtering the image data to produce the image data signal.

11. (Original) The apparatus of claim 8, further comprising:

- a sub-sampling filter for sub-sampling the image data to produce the image data signal.

12-13. (Canceled)

14. (Previously Presented) The apparatus of claim 8, further comprising:

an output device for outputting to a de-screening device the output signal which is an estimate of the halftone screen frequency.

15. (Currently Amended) A single channel apparatus for estimating a halftone screen frequency, comprising:

means for measuring a contrast of image data;

means for adjusting a factor multiplied to a frequency measurement signal based on the measured contrast;

means for combining a the multiplied frequency measurement signal with an image data signal to produce an output signal;

means for adjusting a factor multiplied to the frequency measurement signal;

and

means for interpolating the halftone screen frequency; and

means for subtracting a frequency measurement from the image data signal, to produce the frequency measurement signal.

16. (Canceled)

17. (Previously Presented) A tangible computer-readable medium that stores computer-executable instruction which, when executed by a computer, causes the computer to perform the method of claim 1.

18-19. (Canceled)